A.D. 1796 N° 2139.

SPECIFICATION

OF

RALPH WEDGWOOD.

STOVE.

LONDON:
PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,
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Price 2s.
1854.

A.D. 1796 N° 2139.

Stove.

WEDGWOOD'S. SPECIFICATION.

TO ALL PEOPLE TO WHOM THESE PRESENTS SHALL COME, I, RALPH WEDGWOOD, of the Hill, in Burslem, in the County of Stafford, Potter, send greeting.

WHEREAS His most Excellent Majesty King George the Third, by His Letters Patent under His Great Seal of Great Britain, bearing date at Westminster, the Third day of October, in the Thirty-sixth year of His reign, did grant unto me, the said Ralph Wedgwood, my exors, admors, and assigns, His said Majesty's especial licence, full power, sole priviledge and authority, that I, the said Ralph Wedgwood, my exors, admors, and assigns, and every of them, by myself and themselves, or by mine and their deputy or deputies, servants or agents, or such others as I, the said Ralph Wedgwood, my exors, admors, or assigns, should at any time agree with, and no others, from time to time and at all times thereafter during the term of years therein expressed, should and lawfully might make, use, exercise, and vend "MY NEW INVENTED STOVE UPON A NEW PRINCIPLE, WHEREBY GREAT ADVANTAGES WILL ARISE TO THE PUBLIC IN EVERY INSTANCE WHERE SUCH AN APPARATUS IS APPLICABLE," within that part of His Majesty's Kingdom of Great Britain called England, His Dominion of Wales, and Town of Berwick upon Tweed, in such manner as to me, the said Ralph Wedgwood, my exors, admors, and assigns, or any of them, should in his or their discretions seem meet, and that I, the said

Ralph Wedgwood, my ex̃ors, adm̃ors, and assigns, should and lawfully might have and enjoy the whole profit, benefit, commodity, and advantage from time to time coming, growing, accruing, and arising by reason of the said Invention, for and during the term of years therein mentioned, to have, hold, exercise, and enjoy the said licence, powers, priviledges, and advantages therein-before granted or mentioned to be granted unto me, the said Ralph Wedgwood, my ex̃ors, adm̃ors, and assigns, for and during and unto the full end and term of fourteen years from the date thereof next and immediately ensuing, and fully to be compleat and ended according to the Statute in such case made and provided; in which said recited Letters Patent is contained a proviso that if I, the said Ralph Wedgwood, should not particularly describe and ascertain the nature of my said Invention, and in what manner the same was to be performed, by an instrument in writing under my hand and seal, and cause the same to be inrolled in His Majesty's High Court of Chancery within one calendar month next and immediately after the date thereof, that then the said recited Letters Patent, and all liberties and advantages whatsoever thereby granted, should utterly cease, determine, and become void, anything therein-before contained to the contrary in anywise notwithstanding, as in and by the said recited Letters Patent, reference being thereunto had, will more fully and at large appear.

NOW KNOW YE, that I, the said Ralph Wedgwood, do hereby declare my said Invention, and declare that the same is of the description and to be performed as in the Plan drawn thereof hereunto annexed, and herein-after particularly mentioned, in manner following (that is to say):—

My stove, which is applicable to various manufactories, is calculated principally for the use of manufacturers of earthenware and china. It consists in part of a potter's oven, of any shape or size, with the fire-places situated within and adjoining to the interior diameter of the exterior walls or under the bottom of the oven part of the stove, instead of being placed as was usual on the outside of the oven, and within this part of the stove, glass, bricks, tiles, and all other substances which require intense heat may be baked, fused, roasted, or calcined, which I effect in two ways, in the first place, by placing underneath the bags or upright flues an ash grate and ash hole, in the manner of an air furnace. The fuel I introduce through a door in the side of the bag about nine inches square and about twenty-four inches above the top of the ash hole; betwixt this door or feeder and over the ash hole, I place another wide grate for the farther admission of air and for clearing the bottom ash grate of cinders. In the second place, I place the fire in flues under the bottom of the oven, running in lines from the circumference to the centre of

the oven, the width of which are from seven to twelve inches and the depth from sixteen to twenty inches; underneath these flues I use grates and ash holes, in the manner of an air furnace. The flame passes out at the top of these flues, through apertures from eight to twelve inches, as under, and from two to eight inches square, which flame rises perpendicularly amongst the saggers, or, if necessary, it is screened from them by small loose pipes, to be placed over the apertures, and of the same size with the apertures. The feeders are at that end of each flue which joins the exterior wall of the oven, and are about nine inches square, and are to be at the top of the fire-place; when the flame has passed through the oven, I introduce it under various flues built at the top of the oven and around that circumference of the hovel which is on a level with the oven top; the floor upon which the flues rest is supported by cast iron bars passing from the oven top to the hovel side. The top part of these flues is overlaid with quarry, in the manner of slip kilns in general, and is convenient for drying clay or roasting, drying, boiling, or baking any substances which require a less degree of heat than is supplied from the oven part of the stove. The lower floor of the flues passing parallel with the circumference of the hovel is formed of plates of cast or wrought iron, or of earthenware tiles; by means of the under part of these flues the room below is rendered of a proper heat for stoveing any kind of goods. To increase the heat of this room I leave pannels in those sides of the oven part of the stove which are opposite thereto. These pannels are to be from two inches and half to four inches thick, and transmit much heat. When the flame and current of heated air have passed the circumference of the hovel, I introduce it by means of thin iron or clay pipes through various other apartments which require less degrees of heat. To accelerate the draught of this stove and to raise the heat I cause a column of the steam of water to pass through the fire at the ash grate or any other convenient part; the several parts of the stove are delineated in the several Figures or Drawings thereof hereunto annexed. The Figure N° 1 describes the basement of the oven part of the stove, and the letters *a* in that Figure describe the foundation of the exterior wall of the oven part of the stove. The letters *b* in that Figure describe the foundation of the bags or flues. The letters *c* in that Figure describe the ash holes. The Figure N° 2 describes the first floor of the oven part of the stove, and the letters *a* in this Figure describe the exterior wall; and the letters *b* in this Figure describe the fire-place and the ash grates at the bottom of the fire-places. The letters *c* in this Figure describe circular flues passing out of the sides of the fire-places and communicating with the central flue at the letter *e* in this Figure by the flues *d*. The letters *f* in this Figure

are horizontal flues communicating with the central flue *e* in this Figure. The letters *g* in this Figure, at the broad end of the angular form, describe angular bricks to be placed in the middle of the broad end of the flues *d*, in this Figure, for the purpose of conducting the flames passing from the fire-places through the flues *d*, in this Figure, into the central flue *e*, in this Figure. The Figure N° 3 describes the exterior form of the oven part of the stove, and the letters *a* in this Figure describe the ash holes. The letters *b* in this Figure describe the registers. The letters *c* in this Figure describe the door to the registers, and the places at the letters *b* in this Figure also serve for feeders to the fire-places. The letters *d* in this Figure describe spy-holes. The letters *e* in this Figure describe the pannels. The letter *f* in this Figure describes the door into the oven part of the stove. The letters *g* in this Figure describe iron bonds for keeping the work together. The letters *h* in this Figure describe projecting bricks to support the bonds. The letters *i* in this Figure describe the wide grates for the further admission of air, and for clearing the bottom ash grate of cinders. The Figure N° 4 describes the first floor of the kiln part of the stove; and the letters *a* in this Figure describe the aperture from which the fire issues at the top of the oven part of the stove. The letters *b* in this Figure describe flues passing from the side of the aperture (*a*, in this Figure). The letters *c* in this Figure describe brick walls dividing the aperture *a* in this Figure. The letters *d* in this Figure describe brick walls to support the kiln quarry. The spaces described by arrows in this Figure are the flues for the passage of the current of heat and smoke under the kiln quarry. The letters *e* in this Figure describe the road or passage around the kiln. The letter *f* in this Figure describes the door or hatchway into the passage. The letters *g* in this Figure describe the kiln walls. The letters *h* in this Figure describe the hovel walls. The letter *i* in this Figure describes the chimney wall. The Figure N° 5 describes the covering or top of the kiln part of the stove. The letters *a* in this Figure describe the road or passage. The letter *b* in this Figure describes the entrance to the passage. The letters *c* in this Figure describe the kiln walls. The letter *d* in this Figure describes the chimney wall. The letters *e* in this Figure describe the passage of the chimney. The letters *f* in this Figure describe the hovel walls. The single lines verging towards the centre describe the quarry or covering of the kiln. The letters *g* in this Figure describe the circular wall or mid-feather, dividing the flues and supporting the quarry. The letters *h* in this Figure describe a small projection for supporting the kiln quarry.

The Figure N° 6 describes a section of the stove compleat in all its parts.

A.D. 1796. October 3. Nº 2139.
WEDGWOOD'S Specification.

Nº 1. The Basement of the Oven part of the Stove.

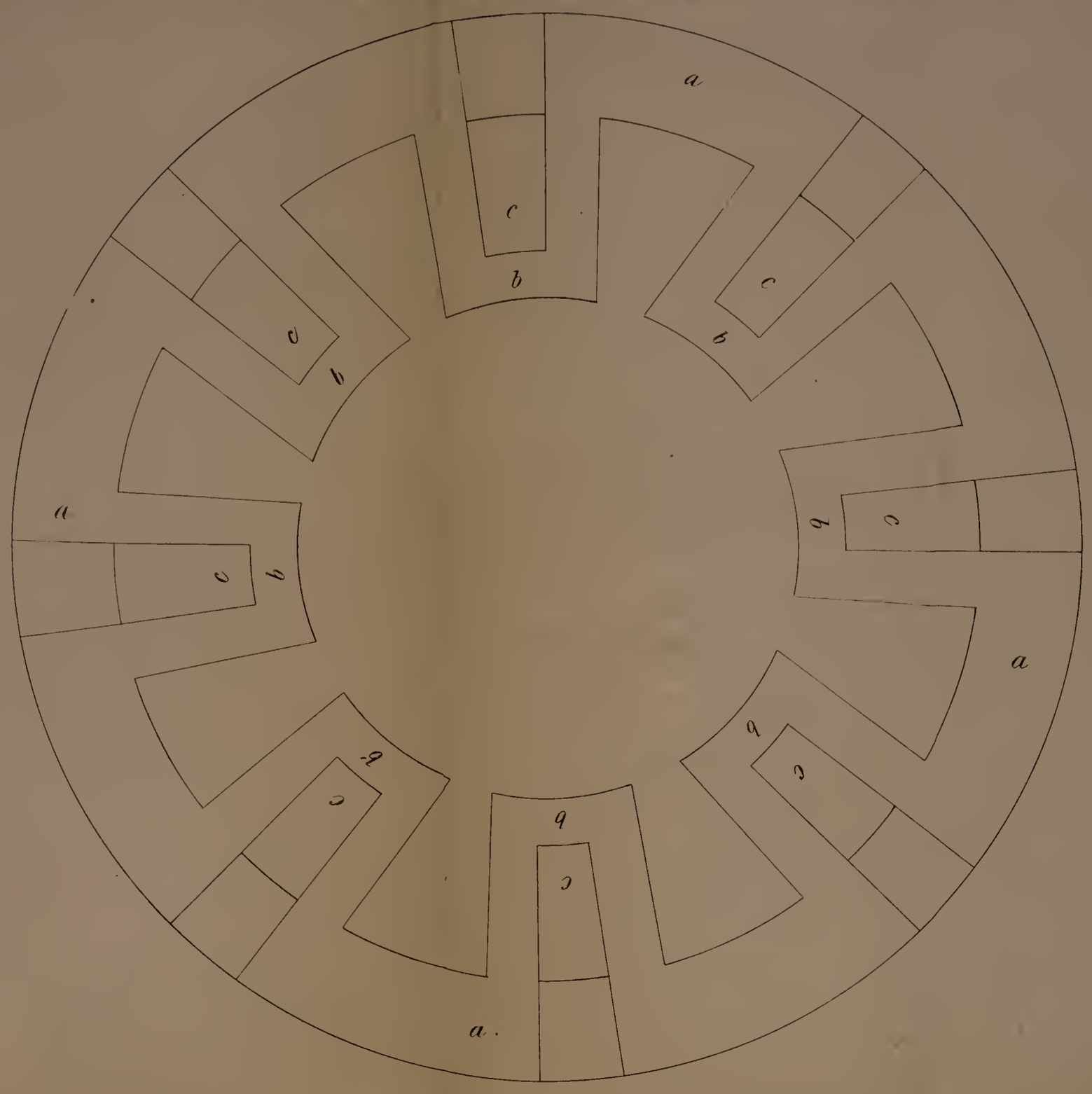


FIGURE 1.

Nº 2 First floor of the Oven part of the Stove.

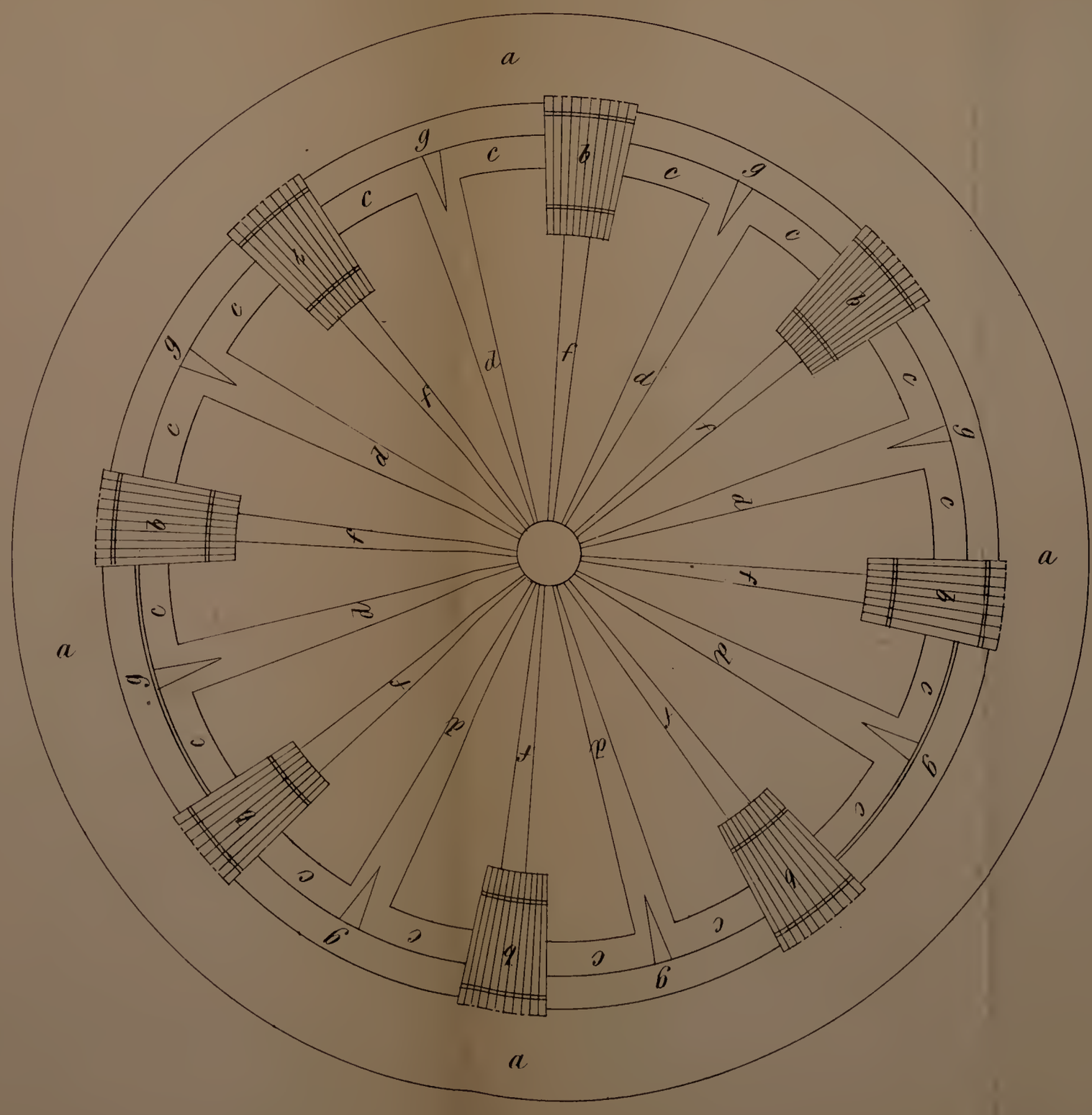


FIGURE 2.

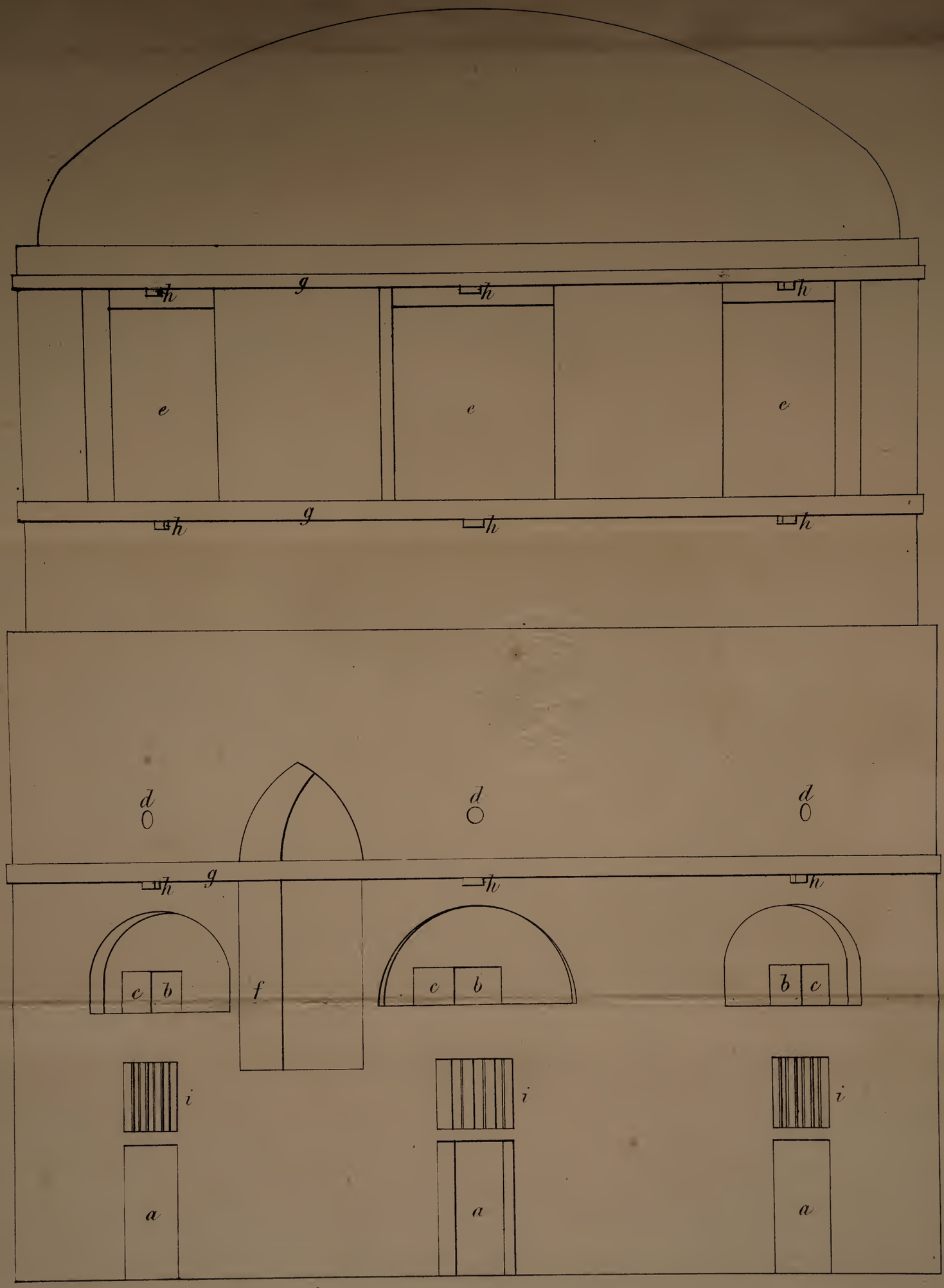
The enrolled drawing is colored.

Malby & Sons lith.

London. Printed by George Edward Eyre and William Spottiswoode.
Printers to the Queen's most Excellent Majesty. 1854.

A.D. 1796. October 3. Nº 2139.
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The External Form of the Oven part of the Stove



The enrolled drawing is colored.

Malby & Sons, Lith

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Printers to the Queen's most Excellent Majesty. 1854.

Nº 4. THE FIRST FLOOR OF THE KILN PART OF THE STOVE.



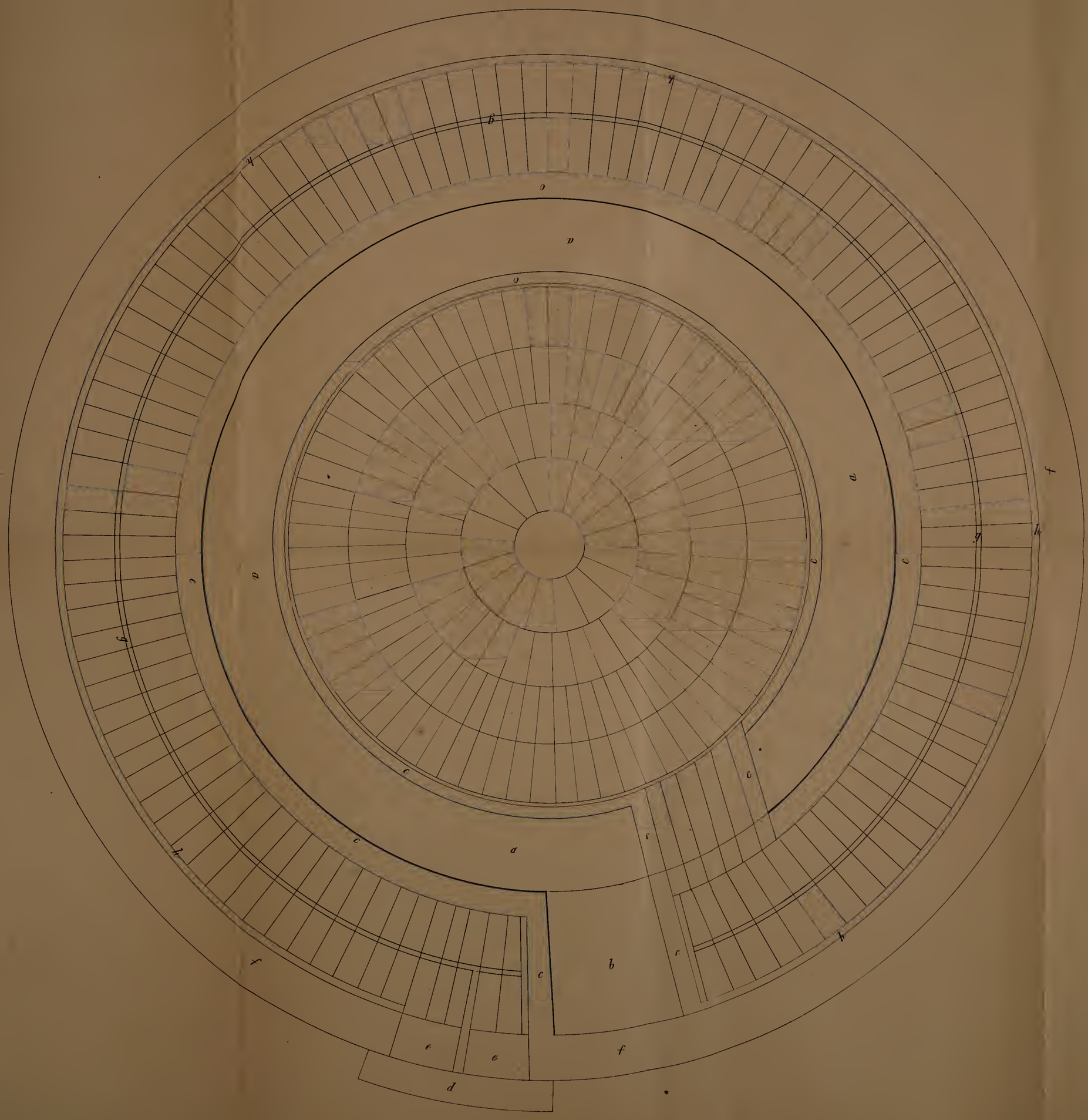
The enrolled drawing is partly colored.

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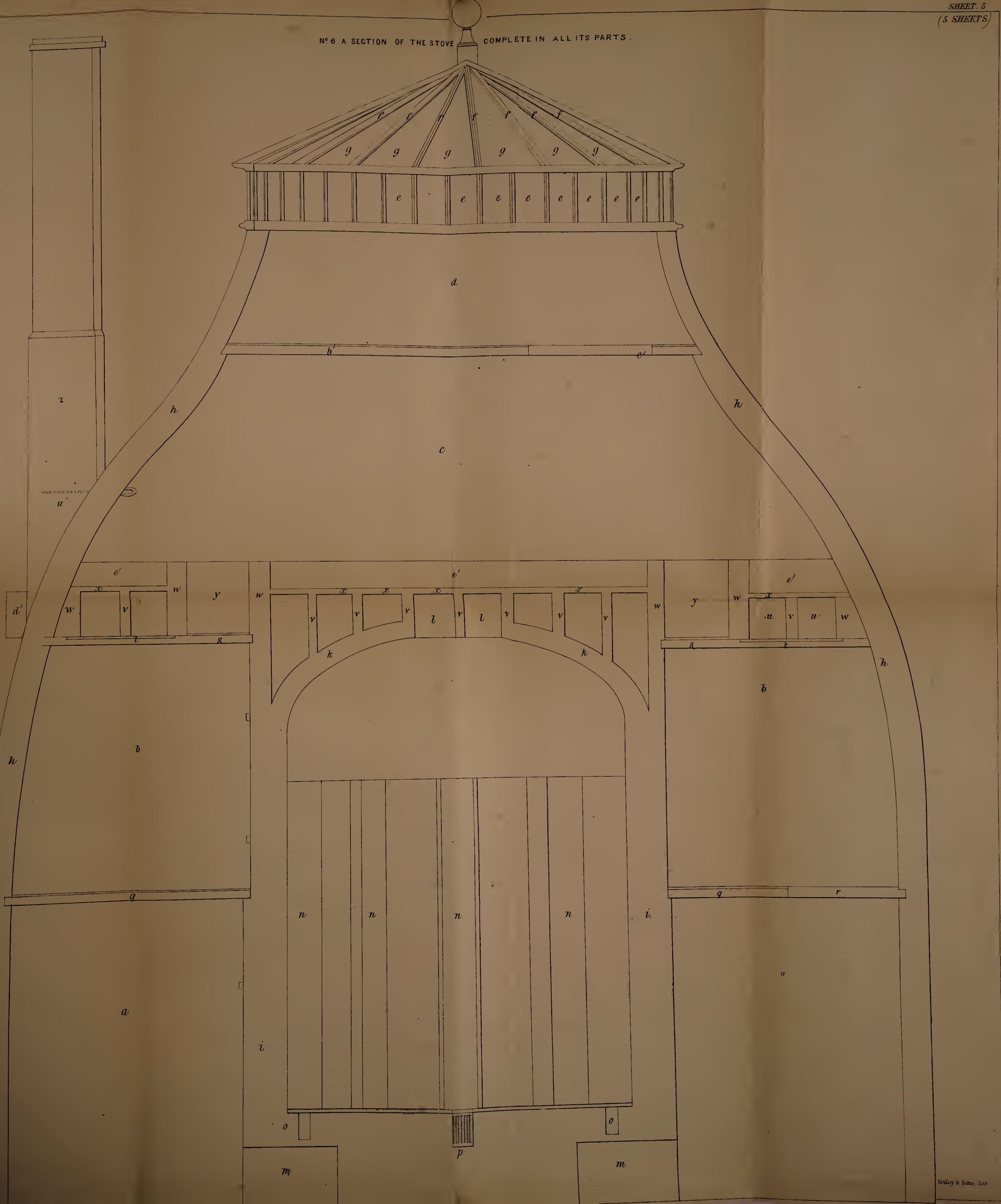
Nº 5 — THE COVERING OR TOP OF THE KILN PART OF THE STOVE.



The enrolled drawing is partly colored

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Printers to the Queen's most Excellent Majesty. 1854.

Nº 6. A SECTION OF THE STOVE COMPLETE IN ALL ITS PARTS.



colored

Malloy & Sons, Inc

The letters *a* in this Figure describe the sagger house. The letters *b* in this Figure describe the stove room. The letter *c* in this Figure describes the kiln room. The letter *d* in this Figure describes a room over the stove room. The letters *e* describe the windows. The letters *f* describe the spars of the roof. The letters *g* describe the roof. The letters *h* describe the walls of the hovel. The letters *i* describe the upright walls of the oven. The letter *k* describe the arch or dome of the oven. The letters *l* describe the apertures at the top of the oven. The letters *m* describe the ash holes. The letters *n* describe the bags or upright flues. The letters *o* describe the section of the circular flue marked with the letter *e* in Figure N° 2. The letter *p* describes the central flue into which the flues marked with the letters *c*, *d*, *f*, in Figure N° 2 discharge themselves. The letters *q* describe the floor of the stove room. The letter *r* describes the passage or doorway into this room. The letters *s* describe cast iron bars to support the floor of the kiln room. The small single lines over the letter *t* describe the iron plates or earthen tiles at the bottom of the flues marked with the letters *u*. The letters *u* describe the flues under the kiln. The letters *v* describe the mid-feathers. The letters *w* describe the kiln walls. The letters *x* describe the kiln bottom. The letter *y* describes the passage around the kiln. The letter *z* describes the chimney. The letter *a*, 1, describes the damper. The letter *b*, 1, describes the floor of the upper room. The letter *c*, 1, describes the doorway into the same. The letter *d*, 1, describes a passage for a connecting pipe to heat other rooms if adjoining. The letters *e*, 1, describe those parts on which substances are put to dry.

In witness whereof, I, the said Ralph Wedgwood, have hereunto set my hand and seal, the Second day of November, in the thirty-seventh year of the reign of our Sovereign Lord George the Third, and in the year of our Lord One thousand seven hundred and ninety-six.

RA. WEDGWOOD. (L.S.)

Signed, sealed, and delivered by the within-named Ralph Wedgwood, (being first duly stampt) in the presence

WILLIAM SCOTT,
Inner Temple.

JOSEPH LANE YEOMANS,
Clement's Inn.

Wedgwood's Improved Stove, &c.

SIMEON.

AND BE IT REMEMBERED, that on the Second day of November, in the year of our Lord 1796, the aforesaid Ralph Wedgwood came before our said Lord the King in His Chancery, and acknowledged the Specification aforesaid, and all and every thing therein contained and specified, in form above written. And also the Specification aforesaid was stampt according to the tenor of the Statutes made for that purpose.

Inrolled the Second day of November, in the year of our Lord One thousand seven hundred and ninety-six.

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Printers to the Queen's most Excellent Majesty. 1854.